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DIRECT RESEARCH WORK PROJECT

CUSTOMER DISCOVERY PROCESS ON A MULTI-SIDED WEB PLATFORM

MENTFORM PRACTICAL CASE



Miguel Ângelo Machado Pinto #2316

A Project carried out on the Master in Finance Program, under the supervision of:

Professor Miguel Muñoz Duarte

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Abstract:

Startups face enormous challenges, especially in the process between having an idea and transforming it into a real business. In order to successfully launch a startup, it is key that the founders understand the *Customer Development* process. This knowledge will allow them to develop a more accurate product/service when the scaling phase is achieved. This thesis will study existing generic literature on startup *Customer Development* processes and specific literature on Multi-Sided Web Platforms (MSWP). A practical case based on Mentform -a seed stage MSWP- will then be presented and the learnings, based on empirical data and execution, will build some recommendations and enforce existing literature to help future practitioners to apprentice from these empirical learnings.

Keywords: Entrepreneurship, Web, Customer, Discovery

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1. Introduction

Entrepreneurship has been attracting some attention over the past few years. After the global crisis in 2008, this topic has been given increasing attention, as revealed by Robert Fairlie for *Strategy Business*, “Many sources of angel investments, bank loans, and venture capital have dried up. However, the rapid increase in layoffs, the availability of newly unemployed workers, and a dearth of employment alternatives may have combined to create higher numbers of entrepreneurs than in pre-recession years.” (Fairlie, 2012)

Although being a hot topic, turning an idea into a real business is a challenge not everyone is able to overcome. As a matter of fact, as stated by Steve Blank in Harvard Business Review (HBR), “The odds are not with you: As new research by Harvard Business School’s Shikhar Ghosh shows, 75% of all startups fail.” (Blank 2013)

To correctly address this problem, one should first understand what a startup is: “a temporary organization designed to search for a repeatable and scalable business model.” (Blank and Dorf 2012). The process by which that business model is discovered and the right path to a sustainable business has recently been attracting the attention of some academics.

The academic research on how to increase the odds of success of a new venture, is increasingly based on *Customer Development* to obtain a better market fit. The best known authors on the subject are Eric Ries, Silicon Valley entrepreneur and author of *Lean Startup*, and Steve Blank, also a Silicon Valley entrepreneur and Entrepreneurship Academician, with its contribution with the *Customer Development* Process. However, and considering that startups are a recent topic, even Eric’s mentor, Steve Blank, states: “We are building the first management tools for startups” (Blank and Dorf, 2012). Hence, the whole focus of the thesis will be directed to the *Customer Discovery* (the first step of the *Customer Development* process) and how it can help startups to increase their odds when building a scalable and sustainable business model for Multi-Sided Web Platforms (MSWP).

The reason for this specific emphasis has to do with the practical case characteristics under which the thesis is constructed – Mentform, a Multi-Sided Web platform. Given that the mentioned startup is still in a seed stage, the available data only allows for an analysis to be undertaken until the end of the *Customer Discovery* process. This specific type of startup is a niche (even though it is increasingly discussed between executives) and there is a lack of research, not on the approach used to run and monetize these kind of ventures (there are plenty

cases made based on Facebook, Airbnb, Uber, among others) but rather on their *Customer Discovery* and process between the idea formulation until a functional platform is fully implemented.

2. Research Outline

This Research outline will describe what the research question consists of and its relevance. Moreover, a methodology will be shown to reveal how one will assess the answer to the whole thesis and which tools will be used.

2.1 Research question

The aim of this thesis is to better understand “how to optimize the *Customer Discovery* process on a Multi-Sided Web Platform”. Developing and validating an idea is one of the biggest challenges startups face. Whilst there is no right answer for it, there are certain approaches to the matter that have proved to be more efficient. We seeked to understand what should be our focus, which types of customers should we satisfy and how to create a value proposition to have a sustainable community within our platform. The answer to the research question was the only way we had to improve the odds of success and allow future practitioners to learn from this entrepreneurial experience.

2.2 Research Methodology

To correctly address the problem, one should first design the way the topic will be explored. Initially, generic literature on startup development will be described, starting with a historical overview and followed by some articles and theories in which this practical thesis will be based on. Furthermore, some specific research on MSWP will also be analysed.

With the existing generic and specific literature explored, a practical case will then be presented. The practical case starts with the design of a *Business Model* resulting in a Business Model Canvas (BMC), customized to our MSWP. Initially, the BMC roadmap constructed will be based on the founders’ vision: “Customer Development starts with a founder’s vision and a product in-hand” (Blank 2014).

Afterwards, the *Customer Discovery*^a process will take place and some adjustments to the initial BMC will be made. For these adjustments, the team collected analytical data and feedback

^a It is important to highlight that *Lean Startup*, the main methodology used, is constituted by, among other topics, *Customer Development* which is divided into 4 steps. However, the focus will be on the first part: *Customer Discovery*.

which allowed to design a more accurate BMC based not on the founders' vision, but on the needs and desires of customers, to obtain a better market fit.

At the end, founders will have a BMC that will allow them to take over the next steps on *Customer Development*. This topic will be further explored in “3.1.3 *Customer Development*”.

The whole methodology described above can be summarized in the following diagram.

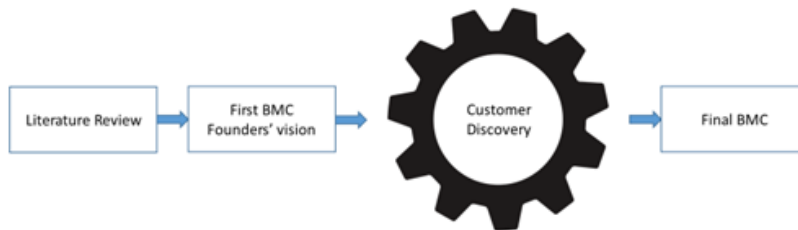


Figure 1. Research methodology diagram

In conclusion, having collected empirical evidence, one will try to achieve an answer to the research question and, consequently, contribute to the existent literature on this increasingly interesting area of entrepreneurship.

3. Literature Review

3.1 Generic Literature Review

3.1.1 Historical Overview

Throughout the 90's and early 00's, methods for startup development were based on the management processes used in big corporations – “They adopted a methodology for product development, launch, and life-cycle management almost identical to the processes taught in business schools for use in large corporations” (Blank and Dorf, 2012). By then, when founders had a vision, they would develop an entire product immediately after and only then would they discover their customers wants and needs in more depth (a diagram summarizing the process can be seen in appendix 1). This process lead to enormous problems, especially during the dotcom bubble as most startups found, after years of development, that they had developed unwanted products/services.

3.1.2 *Lean Startup*

To solve this problem, Eric Ries created a new startup model, which would culminate in the *Lean Startup* methodology. This line of thinking was based on Toyota's lean manufacturing

processes: “Lean Startup comes from Lean Thinking, which was a management approach famously applied in Toyota’s factory production system, as they rose to prominence. The term Lean itself was coined by American management academics, themselves great thinkers, as they studied Toyota.” (Ries, 2014). *Lean Startup* can be divided into 3 main steps: *Business Model Design*, *Customer Development* and *Agile Engineering*, being *Customer Development* the core of this thesis and the focus of this literature review.

As stated frequently by Eric Ries’ articles and books, “No Business plan survives first contact with customers” (Ries, 2014). This usually happens because founders’ visions do not match customer real needs. Why? Because even customers do not know what they want until they have a practical service or product at their disposal. Even if market research tells they want the product in a specific way, when they face products/services, the customer acts differently. This represents a huge challenge for startups and the only way to really understand the market is to get a Minimum Viable Product (MVP) and test it.

3.1.3 Customer Development

By obtaining feedback, the product should be then transformed to match customers’ practical feedback. This cycle of *Customer Development* process is easily explained in appendix 2. This cycle is one of the parts of the *Lean Startup* model and is suitable for companies with “These two characteristics – a technology-driven product already in hand and a need for speed – drove the unique characteristics of Customer Development” (Blank, 2014). Steve Blank identifies 4 main steps from the idea until having an actual company: *Customer Discovery*, *Customer Validation*, *Customer Creation* and *Company Building*. The *Customer Discovery* has as key objective to state assumptions on how you are solving client’s problem and how they are supposed to buy your product/service. Afterwards, those hypotheses are to be framed with a *Osterwalders Business Model Canvas* (Non-Relevant Appendix 1). After gathering data and feedback, and changing assumptions based on interviews and client approaches, the *Customer Validation* process takes place and all the research is going to be validated with real customers. Unfortunately, as explained in “2.1-Research Methodology”, *Customer Validation* could not be applied to Mentform due to its maturity stage.

The main handicaps pointed to *Lean Startup* (and consequently to *Customer Development*) are the constant oversimplification of processes and product. According to some authors, namely Guy Kawasaki, the “oversimplification which leads to products hard to love” (Kawasaki 2005) leads to a point where entrepreneurs end up sacrificing quality which often doesn’t allow them

to understand if the problem comes from the idea or from the product itself. This can result in misleading interpretations when it is time to evaluate the results from the MVP. *Startup Magazine* released an article where Stefan Lewandoski, former CTO of Makeshift, enforces the importance of building products that are attractive, instead of building only a product that can be validated. This concept was later labelled as Minimum Lovable Product, and is widely used by Entrepreneurs when they want to mention their MVPs as more than just a bundle of features. Some other flaws are often criticized about this methodology, but they arise mostly due to the type of governance and workload implied in *Lean Startup*, not affecting directly this thesis subject.

3.1.4 Design Thinking

This said, there are similar theories to the *Customer Development* process, such as *Design Thinking*. While *Customer Development* is based on founders' vision that is later changed, *Design Thinking* is based on customer needs and then uses similar processes to *Lean Startup* but with more extensive data collections and validation. This model is most appropriate for large corporations as it "is perfectly suited to situations where the process isn't engineering-driven; time and money are abundant and the cost (and time) of a failure of a major project launch can be substantial" (Blank 2014). The Appendix 3 diagram explains how Design Thinking works.

3.2 Specific Literature

Having introduced the generic literature, it is important to understand how can this be applied to our Multi-Sided Web Platform. By definition, "Multi-sided Platforms are technologies, products or services that create value primarily by enabling direct interactions between two or more customer or participant groups" (Hagiu 2013). As stated in a 2009 study from Harvard, "There is growing interest in the economics of multi-sided platforms (MSPs), which get two or more sides on board and enable interactions between them (e.g., Airbnb, eBay, Uber, XBox, etc). The pioneering models of MSPs introduced by Armstrong (2006), Caillaud and Jullien (2003), Parker and Van Alstyne (2005), and Rochet and Tirole (2003), as well as many more recent contributions, all treat "multi-sidedness" as a given characteristic of the relevant industries and firms." (Hagiu 2013). However, the focus of research has been on the revenue models, the economic value exchanged and strategic decisions where it is always highlighted that "An important feature of most MSPs is that the value to customers on one side of a platform typically increases with the number of participating customers on another side. This is known

as the presence of “cross-side network effects,”” (Hagiu and Wright 2014) Being this certain, it is also truth that besides the clear increasing interest on the topic, there are still a lack of practical cases in this specific phase of the platform that is to transform it from the idea to a working prototype.

3.3 Learnings

After the different theories that were proposed, we can understand why should we apply the *Lean* principles and use the *Customer Development* theories with careful customization. Throughout the practical case, important questions will arise. We followed a strategy based on what existent generic academic research told us, but with a special focus on our platform characteristics, which eventually led us to have a more suitable answer to our research question.

4. Mentform Practical Case

4.1 Context

Mentform is virtual mentoring platform that is currently on beta testing period. The figure 2 is a screenshot of our working platform. (Other screenshot can be found on Non-Relevant appendixes 2-7).

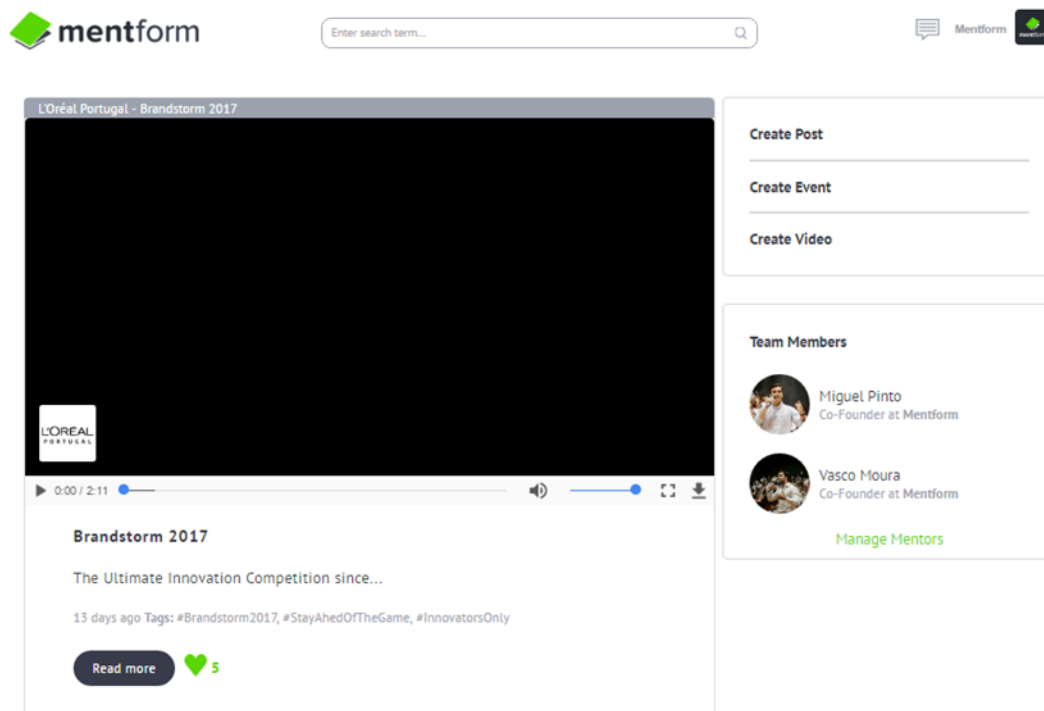


Figure 2: Screenshot from Mentform’s Mentor Feed

Source: www.mentform.com

This beta testing period is being developed alongside with big companies such as L'Oréal, Galp, PwC, BNP Paribas, Uniplaces as well as other small companies that want to increase their awareness among students. Currently, the platform has around 1000 students' registrations and 50 conversations were held during our first month of activity. However, the current status is the consequence of a long process that will be described over the course of this chapter.

While studying at NOVA SBE, especially during the Masters in Finance, I found myself discussing with Vasco Moura, one of Mentform co-founders, that the expectations we had about the corporate world and our life after college were misadjusted to reality. We felt that besides the clear effort made by companies and universities to connect the corporate world with students' academic journey (business forums, corporate events, etc.), ourselves – the students - were completely unaware of what expected us after college. Our main concerns were:

1. What our daily routines were going to be after graduation;
2. Which career path should we pursue, given our interests;

The lack of expectations (and, in some cases, wrong ones) would not allow us to assertively understand what our dream job was, among the numerous job options we had. Besides, we felt we missed some important tips on how to better start our career and how to increase the chances of landing in our dream job. Moreover, some of us did not network enough. Many students left themselves completely enclosed in the academic world not knowing people from the companies where they aspired to work in. This mismatch may represent a problem as some statistics from Forbes magazine reveal that “41% of the jobs landed nowadays are through networking” (Adams, 2011). All these issues were susceptible of improvement and we were focused on trying to solve them.

4.2 – Business Model Design – First BMC

After a brainstorming session, we realized the best way to solve the problem was to create a virtual mentoring platform. A platform where students would receive advice from experienced professionals on the topic mentioned above. The value proposition for students was the advice provided and the connections made whereas mentors, the experienced professionals, would receive money by the time spent in video calls with students. Initially, we felt students would pay for our value proposition and we wrongly assumed that mentors would be interested in spending time with students for the average price per hour received in their daily job. (We

assumed that a €30 per hour fee was a fair price and a good incentive to spend time with students).

To correctly address the problem, our first step was to determine the size of both sides of our platform. On the mentors' side, we considered it was unlimited, since we felt that a lot of professionals would like to spend time with students through a video-call, sharing experiences and earning money for that. Since Mentform was missioned to be a B2C business, where students were the ones paying, we started to make a more complex analysis of our target market.

Based on available Data in www.Pordata.pt, we assumed every student, namely business school students, computing sciences, law, mathematics and engineering students, were willing to pay for that kind of advice as it constitutes one of the most important turning points in every young student's life. Since this value proposition was stronger for engineering and business schools' students, we segmented it based on the available data that can be easily examined in Appendix 4.

The green areas shown in Appendix 4 were the ones we considered to be our target market (from this point, green areas will refer to the areas highlighted in the graph which are the ones we consider that can be interested on Mentform), with a total of 242 545 students in 2016. The changes in this number over the next years was not a critical factor to consider. We wrongly believed, that every single student would use our platform and would be willing to pay for it. Now that the target market was defined, it was time to frame everything on a BMC. The following figure shows our first draft on what would later be Mentform.

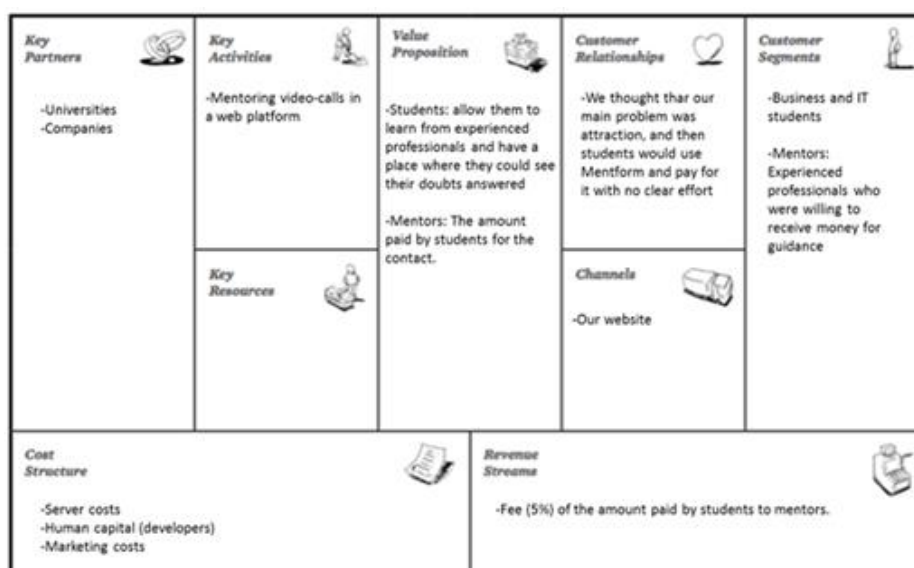


Figure 3: Mentform initial BMC based on founders' vision

This naive vision was based on our first assumptions, before any feedback from students and mentors. Eventually, after doing our fair share of research, we went out of the building.

4.3 Validation process

The validation process is, for Steve Blank, the most important step for startups: the validation of assumptions with potential customers. The feedback obtained and the patterns noticed should be incorporated in the BMC, leading to continuous cycles of feedback and consequent improvement. The next pages will focus on how we have looked at each specific block of the BMC and how we changed our vision to what it is today, based on the feedback and data we have collected. Without knowing it, we were starting our real *Customer Discovery* journey.

4.3.1 Market Size

The first step was to properly determine the market size. As mentioned, at first, we assumed every student would be interested in our platform. First, it was important to understand the market size to “seize the opportunity of your new venture.” (Blank and Dorf, 2012), based on real data we collected.

There are 3 important metrics for investors and founders when it comes to studying the market size:

- Total addressable market (TAM) – “how big is the universe.” (Blank and Dorf, 2012)
- Served Available Market (SAM) – “How many can I reach with my sales channel”. (Blank and Dorf, 2012)
- Target Market: “who will be the most likely buyers/users” (Blank and Dorf, 2012)

Using the information available on these metrics, we should analyse the market size of the Student and Mentors side of the platform.

Student side: In our first draft, we assumed that the TAM was our target market, which was, in fact, a substantial mistake. It was clear that Mentform would give students an opportunity to better understand and pursue their interests, but we could not assume that all of them were willing to pay the price (30€ per hour - the average price of archetype mentors’ wage) required by mentors to spend time talking with them. To determine the real potential of our platform as it was, we surveyed 450 students divided in 3 groups:

- Top business schools, NOVA SBE and Catolica Lisbon SBE – 150 students

-Regular Business Schools: ISCTE and ISEG – 150 students

-Engineering and IT Schools: NOVA FCT and IST – 150 students

The main objective of this survey was not only to understand their interest in talking with mentors through video calls, but most of all, what would be their willingness to pay for this service.

The Appendix 5 describes the percentage of students in each of our groups, that was interested to talk with mentors through video-calls.

These results confirmed what we expected, students were interested in this type of conversation. However, our target market (defined in page 11) was defined assuming that every student was going to be interested in interacting with mentors through video-calls, which was proved not to be true. To define a more accurate target market, we decided to use our more pessimistic results (Engineering and IT Schools), to set a national wide scenario. Since we only had 44% of those students interested in this type of conversation, we decided to redefine our target market:

-TAM: The students from green areas of Appendix 4

-SAM: 44% of the TAM - By multiplying the 44% by our TAM we ended up with the value of around 106 000 students. By definition, SAM is the number of customer we can reach through our sales channel. Assuming that the we could reach every student that is interested in this type of conversation we would consider it our SAM.

However, this was only the first change. In the second question of the survey, we decided to analyse responses on their willingness to pay (Appendix 6).

These results demolished our vision. In our first draft, we assumed that 100% of the green areas' students were willing to pay for our platform, where in fact only 2500 were willing to do so (this value was obtained by multiplying our TAM by the percentage of students that wanted video calls in Engineering and IT Schools). In Appendix 7 we can easily see the difference between our target market before and after obtaining feedback from students.

Moreover, our data also revealed that the students who were willing to pay the price defined by us were interested on different areas/industries than the ones who didn't want to pay that price tag, as presented in Appendix 8. By analysing the data provided, we identified 2 main problems with the obtained info:

1. The market was not big enough to explore in Portugal and validate our assumptions. Knowing this, the only way to validate was to expand worldwide, process which would require enormous funds on marketing to acquire that small percentage of students spread throughout the world (to have a profitable business a huge market would be needed).

2. Our target market wanted to talk with experienced professionals from industries (investment banking and consultancy boutiques) where employees typically work more than 15 hours a day, which would make them less available to participate in this type of initiatives, even if they were getting paid for it.

Mentors Side: Even with these disappointing values, we decided to talk with mentors. The first mentors we approached worked on Consultancy boutiques and Investment Banks. As we suspected, they told us it was not of their interest to participate in this kind of initiative. Following this, we contacted the ones that were of interest for the majority of the students in our sample—big multinationals’ professionals. By explaining our vision to them, we understood they were less interested in receiving compensation for the time they would spend with students, but more interested in attracting students to join their companies by using our network. So as to explore this, we scheduled some meetings with Human Resources (HR) and recruitment offices of multinationals and, in fact, companies were putting serious effort on employer branding and contact with students. Our platform was doing it by giving companies the opportunity to have a closer access and contact with highly motivated students. There was, indeed, value being created and, as referred by Gillian Horan, “I want to stress employer branding is not about tricking people into believing you are amazing employer. It is about taking the opportunity to tell people what is so good about your company.” (Gillian Horan, 2016)

This last insight was a turning point for Mentform. We realized that with a polished product, we could be able to charge companies instead of students for their presence in our platform. This way, our target market was based only on their interest in conversations with potential employees.

This change of events turned our target market to 106 000 students, in opposition to the 2 500 obtained if students had to pay for the service (we assumed that if students did not have to pay, they would be considered likely buyers). The consequences of these insights were tremendous. We would have more students joining and using the platform whilst Mentform would no longer be a B2C platform, but instead a platform based on a B2B business model.

With his said, different problem arose. Our target market for companies should be examined in more detail: big multinationals, whose recruitment was large enough to benefit from the presence in such platform. After a careful analysis, we identified around 100 companies in Portugal that would be willing to pay for an initiative like this. This assumption was validated, since companies targeted have ALL revealed interest and 65% of companies approached are included in our beta testing period. Thus, the platform would now have 3 types of users: companies, mentors (from client companies) and students.

4.3.2 Competition

As argued by Steve Blank, a competitors' analysis should be made by scrutinising their influence in customer attraction. One should pay attention not only to direct competitors, but to all sort of offers in the market that relates.

Besides the increasing effort companies and schools were making to close the gap between the academic and corporate world, there was room for improvement. If a student wanted to be more informed about the job market, the options available were: participate on corporate events or business forums, a direct contact by email or LinkedIn, or mentorship programs. Corporate events and business forums were a good opportunity, but they only occur once or twice a year and students contact with HR personnel the majority of times. The second situation is rarely used since students feel that it is not the perfect channel to contact with fear of being inconvenient with professionals. Regarding the Mentorship programs, were clearly a real competitor, but they only allowed students to have one mentor and being influenced/informed only in one specific industry or company, by a certain professional. The diversification allowing the student to communicate between all the areas of interest was not explored by this option. This assumption has been validated by some articles about the subject from which I would highlight one from Financial Times: "In today's complex workplace, one mentor alone often won't do. To spark innovation and ideation, employees (students) often require information from a number of areas in real time." (Jacobs, 2016)

We believed that our product would be innovative and if we had a huge net of companies on our platform students would use, not as substitutes, but as an extra efficient tool to discover their passions and what path to pursue after finishing college.

On the company side, this tool would allow them to reach a specific target of students who were highly motivated to further discover the corporate world.

4.3.3 Customer Segments

One of the most important issues on *Customer Discovery* is to define customer segments. As a MSWP, effort should be put so as to understand which customers we were being faced, since there should be put relevance in focusing on our 3 users involved, and not only to satisfy one type of customer as it usually happens in startups or businesses. It is important to define customer segments, emphasizing the customer problem need or passion, defining it within 4 problems: *Latent Problem*, *Passive Problem*, *Active Problem* or a *Vision*.

Mentform's case was a latent and passive problem on the students' side: they had a problem and they didn't know, or they have the problem but weren't motivated or aware of the opportunity to change. On the companies' side, it was an active problem - they recognized it and were trying to solve it, but didn't have a vision to do so.

Besides that, it is important to define the type of customers within different categories presented in existing literature (Appendix 9). Eventually this segmentation would allow us to create an archetype of the category of customer we should focus on. The importance of the archetype is to better understand how the majority of the market should be addressed and what they value or not in a product/service.

On the students' side, they are the end users and decision makers, whereas on the companies' side, we would have different types of users that should be carefully analysed. As stated in market size our Target Market was defined, but if one had to define one archetype, it would be a 21 year old business school student who wants to join the corporate world and is particularly interested in understanding what will be his/her life after college.

Companies side: The end users were professionals from different departments that would mentor students and the Recruitment/HR/Marketing officers that would use the platform to empower their employer branding strategies and increase the efficiency of recruitment processes.

Influencer/recommenders: Marketing and Recruitment officers, the ones with whom we generally have meetings with. It is important to highlight that those are the ones that will benefit more from our platform and will use Mentform as a tool.

Decision makers: Partners and directors who can approve or not the use of Mentform and the budget spent to be part of it.

On the course of every meeting the key objective was to convince influencers/recommenders, who are generally mid-level managers, the importance of the platform. Throughout our experience gathered from meetings, we realized that they (our archetype) are between 30 and 40 years old, and some of them were aware of the importance of a platform like this. Top managers (decision makers), were not as open to this type of initiatives but, if the value to be added to the company was clear, they would be open to it.

After understanding the audience, the analysis should culminate with an archetype. In every company the archetype that was the focus of our interest was the HR/Recruitment director. If our value proposition was clear for them, eventually they would influence *Partners* and first line directors that the budget spent on Mentform would create value for the company as a whole.

4.3.4 Value proposition based on feedback

As stated above, our first value proposition was to allow students to have contact with the corporate world, and mentors' value proposition was the amount they would receive for video calls. With the last insights, we realized that there was also a significant value proposition for companies and advantage of that should be taken, since they were recognizing value in our platform.

The first step is to create or define a value proposition. Since we are focusing on a web/mobile service, it would culminate in a low fidelity MVP – a product that could validate the interest of customers on the value proposition proposed. The first step to determine the MVP is to state a list of the venture long term vision and product features and benefits. In this list, founders should state what features are indispensable to validate the assumptions and understand if there is, in fact, space to create a sustainable business model. To define the MVP, it is important to highlight the benefits of the whole product and understand if it is possible to take conclusions on the viability of the product when extra features are added. The value proposition for students was similar to the initially stated, but for free. For companies, we would offer the following:

- Employer branding: They would have a platform that would allow them to attract high talented students by having conversations and posting articles/videos which could make students want to join the company.
- Talent attraction: In this small conversations, mentors would share their passions about their job, which would eventually convince some of the interested students that their specific company was the best fit for them.

Our MVP would be based on the following:

- A video call system to talk with students;
- A data base and a panel overview with important information that companies could use to change their position in terms of employer branding and recruitment.
- A profile for every user (student, mentor and company) with access to posts, articles and videos posted by companies.

A different dilemma arose once we defined our new value proposition. There was the need to decide what price to charge companies and whether or not to charge during our beta testing period – this was probably the biggest question we had during our process so far and will be discussed on the conclusion. A similar dilemma is approached by Steve Blank in their Entrepreneurship Course in Stanford. In one of the classes a practical case is presented defining the importance of charging customers for the product since the first customer. This subject on Mentform case will be discussed in chapter “5. Conclusion”.

4.3.5 Channel

Another aspect to take in consideration on BMC is the channel. As a Web platform, the channel was going to be the platform itself for students and mentors. As it will be further explained, the channel for companies are direct sales. However, and since this is not a major issue, we decided not to focus on this part of the BMC, at least while constructing our MVP.

Regardless of the low emphasis given to it, this is probably one of the most important differentiators of our platform. We were finally creating a channel where students and mentors would have the right incentives to connect.

4.3.6 Key activities

In this part, important answers should be achieved: Is there a well establish market? Does the product have better features than its competitors? In this specific case, one should carefully understand the competitors and how Mentform is in possession of a competitive advantage over existing businesses or programs.

Our key activities would be the video calls and text sessions scheduled by students. We would differentiate ourselves from competition, as explained above, and we were the only participants in the market providing such a channel to this specific purpose. As specified in the competition

block, we would have a value proposition advantage over the existing means for students to contact with companies and companies to attract talent.

For Students and Mentors the key activities are the ones described above. For companies, this a method of promoting themselves and, therefore, we should focus on creating value for them trying to ensure the quality of the calls taking place in terms of content.

4.3.7 Customer relationship

Customer relationships should be made to understand how one will create awareness, interest, consideration, purchase and how to maintain customers. The Appendix 10 exhibits the concerns that should be taken in account at every specific level.

Mentform should analyse the customer relationship with companies/mentors and students, to make sure that both sides are large and diverse enough to create a sustainable community. As by the time this thesis is delivered, the platform will already be in the beta testing period, founders will only be able to validate 3 steps from the ones presented on Appendix 10: awareness, interest and consideration

For companies, the first step is “awareness” which happens when we present the platform and the advantages through marketing and recruitment officers who are the main influencers/recommenders. The ideal way to create the desired awareness was through face-to-face meetings where our value proposition could be explained in further detail and where Q&As would occur to persuade them of our value proposition. After some meetings where companies’ concerns were took into consideration to develop the web-app, they accepted to be beta testers of our platform. Then, in the consideration part, which is currently taking place, we should make companies fully understand the value created by having students talking to them with the right incentives. The considerations and purchase part was going to be made through meetings and thus the data collected could justify the price tag we would charge, which is the next step to analyse.

To guarantee there were conversations taking place, we would have to have a large base of students. For this purpose, the first step was to create awareness. We created brand awareness mainly through social media and speeches in Universities, presenting students with the opportunity to have a direct contact with several mentors from different companies and industries.

At this stage, we were focusing on attracting students to our platform. We had 2 main ways to attract students to our platform (Digital Marketing and University Speeches), each of them with different Costs of Acquisition (CAC) as presented in Appendix 11.

For this, we assumed that at this stage the most efficient way to attract them was by using Student Unions' Facebook publications (paid publications) and by going directly to universities and presenting the initiative to students. Being this the focus, we will be presenting Mentform in universities at the beginning of the next semester when a big campaign will take place.

4.3.8 Key resources

At this phase, our key resources would be the human capital. The human capital would emphasize 3 specific areas: Product, Sales (responsible to attract companies to the platform) and Marketing (Responsible to attract students to the platform).

4.3.9 Strategic Partners

Our main partners would be universities, as they would be a vehicle to enable direct connection with students. By giving their students an opportunity to solve this problem, they would give us the chance to use their social media channels, resulting on the creation of further future opportunities to contact directly with these students in open days or specific workshops/presentations.

4.3.10 Revenue Streams/Cost Structure

Finally, a revenue and pricing hypothesis should be made to understand what are the key features that are going to allow the company to be profitable. Revenues would represent the work done through the whole process, which should create a financially sustainable company. Based on the feedback obtained we would be able to charge companies a monthly fee between €250-€500 according to the chosen packages. The first feedback obtained was that they are willing to pay if there is a huge network of students and if the concept is proved through the beta testing period. However, such an answer can only be given when the first payments start to take place.

Ultimately, it is important to determine the cost structure. Businesses with huge revenues can collapse due to its significant costs that may destroy margins. Companies should understand in detail its cost structure to determine the sustainability of the business model. The two main types of costs are Fixed Costs (FC) and Variable Costs (VC). At this point, our fixed costs were only our opportunity cost (€3000 per month for the whole team – non-accounting costs)

and our variable costs would only be our “cloud servers” costs, which are supported entirely by Microsoft BizSpark Program for at least 2 years. Besides these, marketing costs should be taken in account - so far, these can be classified as residuals. However, it is important to understand which will be the cost of acquiring customers in the future (by multiplying the CAC by the number of users wanted when the expansion takes place).

4.4 Learnings: Final BMC

Based on the whole process, important lessons were learned. We realized that generic literature could be applied to web platforms’ *Customer Discovery*. The main assumption should still be to obtain feedback and get out of the building, which allowed us save time. If we had just focused on our vision, we would have spent months developing a good product that wouldn’t have a fit in the market, since the assumptions initially made were not matched with the data gathered.

It is easily seen that the final BMC (figure 4) is significantly different from the one presented in chapter 4.1 – “context and first BMC”. The major learning however, was that we should balance and harmonize the feedback obtained between both parties of the platform, as stated in research outline, to define the right incentives for both parties and maximize their value proposition.

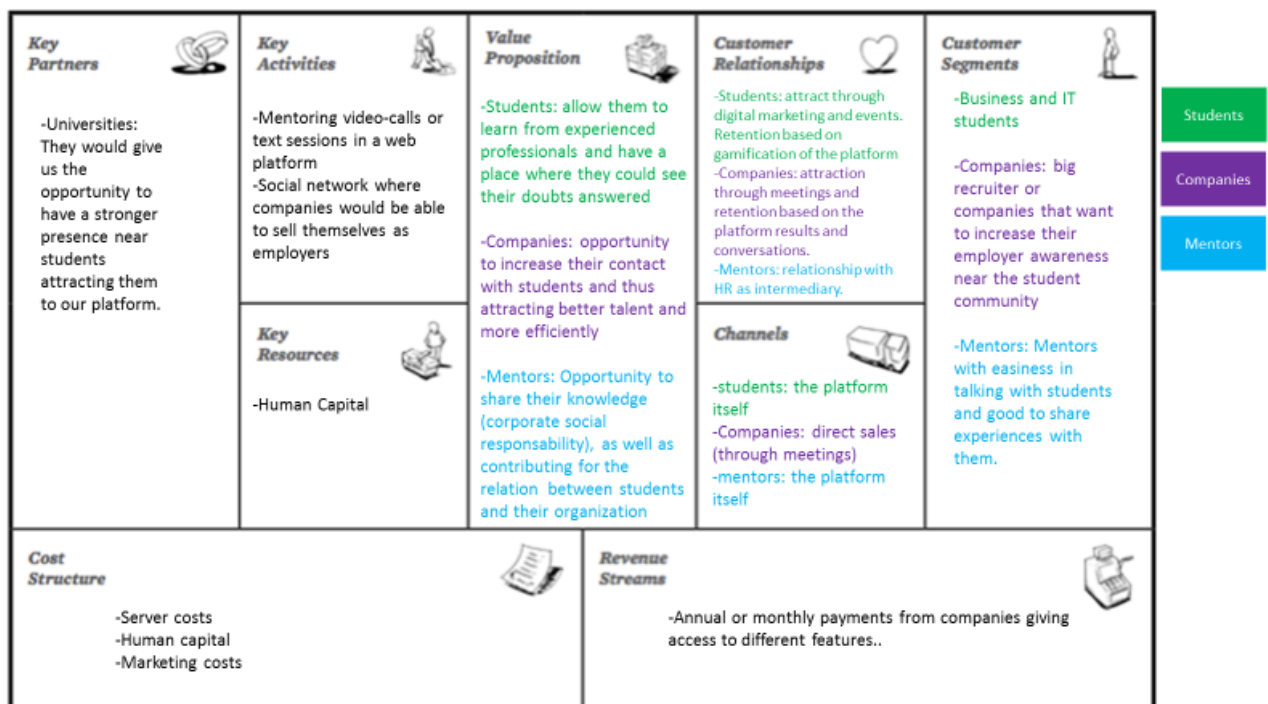


Figure 4: Final BMC with adjustments based on future customers’ feedback

The following BMC (figure 4) shows the final BMC which can be compared with the initial one. It is easy to understand that a strong change took place, but on certain points we could not follow the learnings from the literature review, since this type of platform cannot be validated as proposed in *Lean Startup*, facing the risk of not maximizing the value proposition for every user using Mentform.

5. Conclusion

The research question was designed to understand the best way to discover a business model for a Multi-Sided Web Platform. During the Literature Review, it was stated that existing research revealed that Multi-Sided Markets need unique channel plans. In Mentform, we began by validating and adjusting our initial BMC. We followed the models by validating our assumptions based on constant cycles of feedback. Our adjustments completely changed our initial Business Model. We increased the types of users (firstly the focus was only on mentors and students and then we included companies as a crucial user in our platform), we changed our Revenue Model, and we partially changed our value proposition.

During the whole process, we found some limitations to what we considered to be the best practice in terms of the widely accepted *Lean Startup Model*. We found that we could not validate our assumption (our Revenue Model could not be validated, for instance) and we also realized that we could not have just a bundle of features, since it would turn our MVP into an unwanted product that could not validate our value proposition to all the users involved.

However, there were some specific problems to the MSWPs, and specially to our own case, that we had to take in to consideration. Since different users had different incentives and value perceptions, a trade-off should be taken into account: We could charge companies (thus we would not be able to have big companies paying for a service that was not previously validated) or we could offer a free beta testing period. For students, the most attractive part of our platform is the opportunity we provide them to talk with experienced professionals from the big companies they aspire to work in. On the company side, it was also understandable that they would not pay a high price without having a big pool of students and a completely validated product.

This value perception that depends on the number of users on both sides of the platform (described in Literature Review as Cross-Network effect), creates value for both parts of the

platform and thus it made us not charge companies from the very beginning as suggested by Steve Blank in its Entrepreneurship course.

Having that in mind, we decided not to charge companies until we reached a community size that can actually bring real value to the table, and this is the biggest recommendation we can give to future MSWP founders. In this specific type of startup and since the value proposition for users is highly dependent on the community as a whole, founders should pay special attention on making sure that every choice they make will have an impact on different users and that their decisions (such as our decision to start charging companies without having a perfect product or a big community of students) can have impact on the performance of the platform as a whole.

Now that *Customer Discovery* has been finished, founders are looking to embrace the second step of *Customer Development: Customer Validation*. When every feature of the platform is 100% functional, different pricing strategies will be designed and we will arrange meetings with companies to present it. The revenue models will be tested to determine the sensitivity of companies with regards to the payments (the competitors pricing will be used as a benchmark, although recognizing that their offer has a different value proposition than ours). It is important to have a big community and a good product to start charging companies a higher price, and not a low price that would then be hard to increase later on the course of the business.

This thesis was a brief description of how a group inexperienced students embraced the enormous challenge of launching a startup. Some mistakes were made and are still being made and we expect that our mistakes can help future practitioners on this seed phase of companies, especially for MSWP founders.

6. References

Adams, Susan. July 7, 2011. "Networking Is Still The Best Way To Find A Job, Survey Says." *Forbes*

<http://www.forbes.com/sites/susanadams/2011/06/07/networking-is-still-the-best-way-to-find-a-job-survey-says/#4b4ec4212754> (Accessed 30 November, 2016)

Blank, Steven G. May, 2013. "Why the Lean Startup Changes Everything". *Harvard Business Review*. <https://hbr.org/2013/05/why-the-lean-start-up-changes-everything> (Accessed September 29, 2016)

Blank, Steven G., and Bob Dorf. March 2012. “The Startup Owner’s Manual: The Step-by-Step Guide For Building a Great Company”. *Pescadero, Calif, K & S Ranch, Inc.* Volume I pp. 77-285

Blank, Steven G., July 29, 2014. “Driving Corporate Innovation: Design Thinking vs. Customer Development” *Forbes* <http://www.forbes.com/sites/steveblank/2014/07/29/driving-corporate-innovation-design-thinking-vs-customer-development/#446117406b0f> (Accessed December 16, 2016)

Brown, Paul B., November 30, 2012. “Want To Increase Your Chances Of Success? Get Out Of Your Own Way”. *Forbes* <http://www.forbes.com/sites/actiontrumpseverything/2012/11/30/want-to-increase-your-chances-of-success-get-out-of-your-own-way/#744f80de5cab>

Fairlie, Robert W. June 21, 2013. “How the Great Recession Spurred Entrepreneurship”. *Strategy Business*. <http://www.strategy-business.com/article/re00240?gko=d3750> (Accessed October 12, 2016)

Gillian Horan. April 20, 2016. “The hot topic that is Employer Branding. *Gillian Horan* <http://gillianhoran.com/blog/that-hot-topic-that-is-employer-branding/> (Accessed December 21, 2016)

Hagiu, Andrei. December 19, 2013. “Strategic Decisions for Multisided Platforms”. *MIT Sloan Management Review* <http://sloanreview.mit.edu/article/strategic-decisions-for-multisided-platforms/> (Accessed November 12, 2016)

Hagiu, Andrei, and Julian Wright. March 16, 2015 "Multi-Sided Platforms." *International Journal of Industrial Organization* (forthcoming). https://dash.harvard.edu/bitstream/handle/1/15786564/hagiu,wright_multi-sided-platforms.pdf?sequence=1 (Accessed November 23, 2016)

Hussein, Natsha. July 5, 2015. “What’s wrong with Startup methodology” *Next Web* <http://thenextweb.com/entrepreneur/2015/07/05/whats-wrong-with-the-lean-startup-methodology/> (Accessed October 23, 2016)

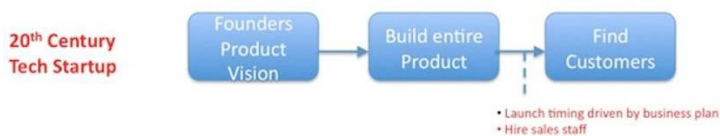
Jacobs, Emma. June 5, 2016. “Benefits of a virtual mentor when time is short” *Financial Times*. <https://www.ft.com/content/8c18f12a-2965-11e6-8b18-91555f2f4fde> (Accessed October 2, 2016)

Ries, Eric. *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses.*, 2011. Print.

Sharkey, Michael. October 16, 2016. “6 things wrong with the ‘Lean Startup’ model (and what to do about it)” *Venture Beat* <http://venturebeat.com/2013/10/16/lean-startups-boo/> (Accessed October 23, 2016)

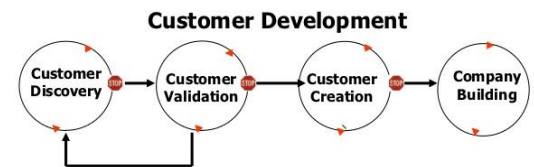
7. Appendixes

1. – 20th century tech startup development



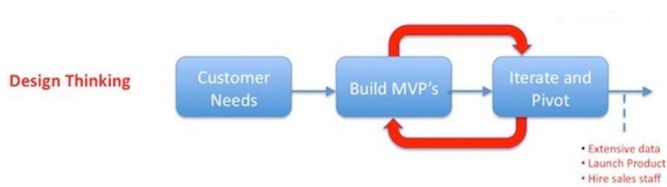
Source - Driving Corporate Innovation: Design Thinking vs. Customer Development (Blank 2014)

2. Customer Development Cycle



Source: <https://steveblank.com/tag/customer-discovery/>

3. Design Thinking diagram



Source - Driving Corporate Innovation: Design Thinking vs. Customer Development (Blank 2014)

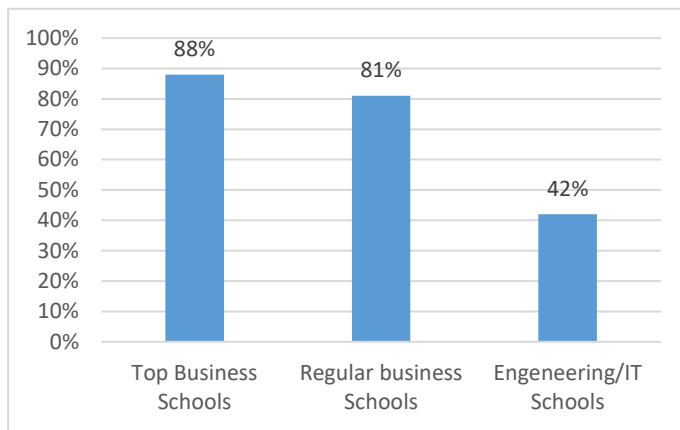
4. Segmentation of 15/16 Portuguese students

Education Area	Number of students
Education	13 969
Art and humanities	36 285
Social Sciences, commerce and law	113 800
Science, Math e Computing	28 476
Engineering and construction	75 899
Agriculture	7 778
Health and Social Protection	55 406
Services	24 370
Total	356 399

Source:

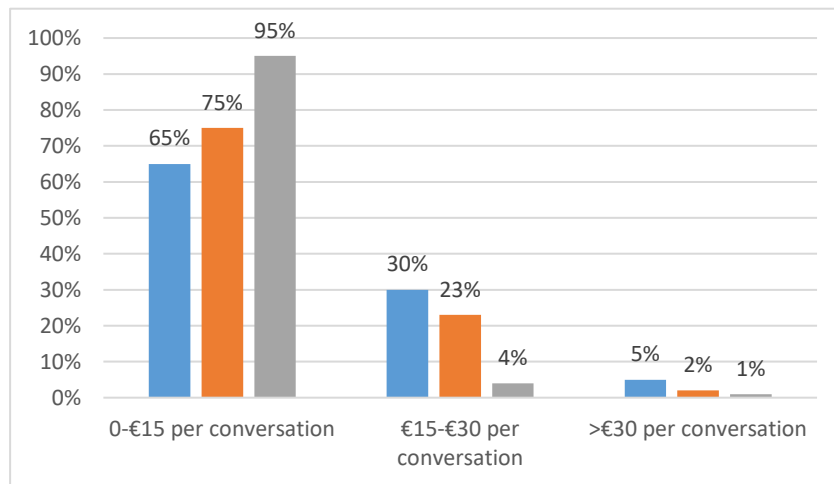
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5. Students interested in talking with mentors



These results are based on the surveys described in the chapter 4.3.5 - Channel

6. Willingness to pay



These results are based on the surveys described in the chapter 4.3.5 - Channel

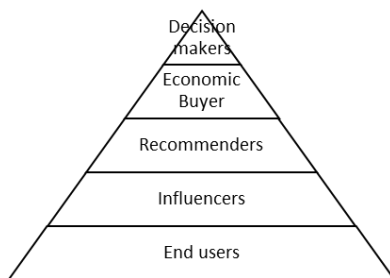
7. Target market before and after feedback

	Nr. of students before feedback	Nr. of students After feedback
TAM	242 545	242 545
SAM	242 545	106720
Target Market	242 545	2425

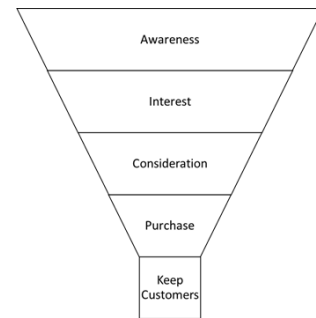
8. Students' Willingness to pay based per industry interest

	Big multinationals	Investment banks	Consultancy firms	Consultancy boutiques	Undecided
Willing to pay >€30	12%	24%	17%	34%	13%
Not willing to pay >€30	36%	1%	13%	2%	48%

9. Customer segments pyramid



10. Customer relationship funnel



11. Customer Acquisition Cost

		Amount spent	Users registred	CAC
Digital marketing	Facebook ads	45,00 €	143	0,31 €
	SU posts	15,00 €	136	0,11 €
	google ads	10,00 €	26	0,38 €
Univeristy pitches		Opp. Costs	178	
Organic		N/A	70	
TOTAL			553	